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Assessment Planning



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Assessment Planning: a process guide with three design options

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**MONTANA OFFICE OF PUBLIC INSTRUCTION
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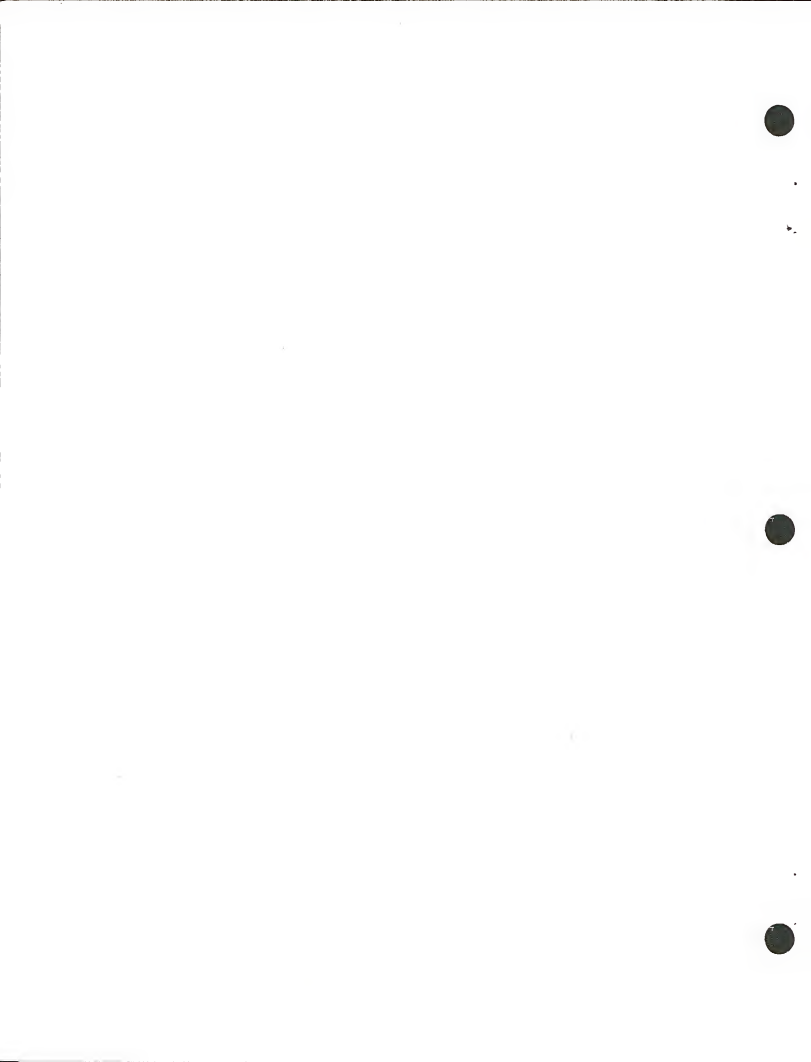
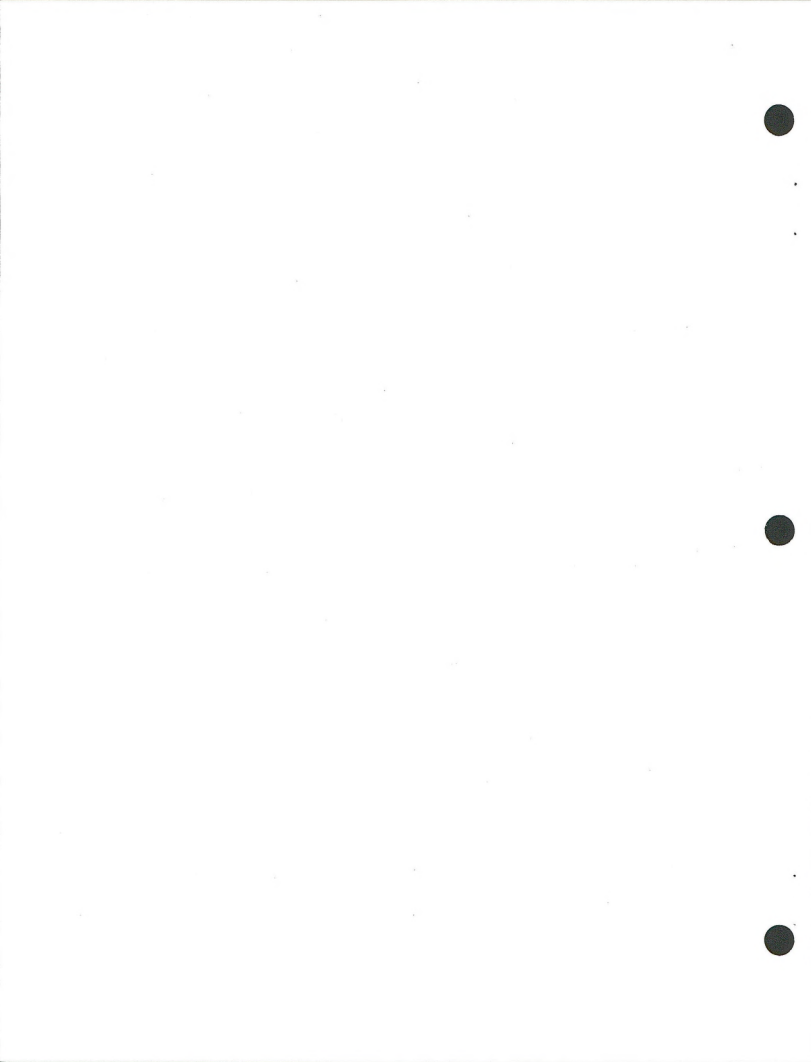


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Introduction

With the national spotlight on assessment and the emergence of multiple forms of assessment, committing an assessment plan to paper is essential. We have already suffered through the consequences of curriculum by default and most educators now appreciate the importance of a written, sequential curriculum. Not only does the curriculum have value, but the curriculum development process is one of the most powerful routes to professional development. Assessment deserves no less planning and attention. When decisions are made about students and programs based upon tests, performances, products, and observations, we must practice the principles of good assessment to achieve equity. When teachers are assessing student work on a daily basis, training in and work with the assessment process is essential professional development.

This guide attempts to provide samples of assessment plans that satisfy the needs of districts at different levels of development in the assessment arena. A simple assessment plan is better than none at all. This process leaves the door open for plugging in new or mandated assessments as they become available. Some districts are developing or using criterion-referenced tests and performance assessments for every subject area. These districts are striving to become accountable for every goal in their curricula and will have little difficulty writing a complex assessment plan.

This guide, on the other hand, attempts to provide three ways for districts to organize *existing* assessments into written plans. This process might reveal the need for the development of additional assessments—perhaps surveys, performances, or observation logs. But this process might also show that a functional assessment has not yet been developed to match some of the district's curricular goals. We recognize that outcomes such as “experience the sense of accomplishment and pleasure from the creative act” (Visual Arts Model Goals) or “demonstrate a commitment to human dignity” (Northeastern Curriculum Consortium) are valuable even though they are difficult (or impossible) to assess within the context of school. This is where follow-up studies may be helpful. In any case, districts should determine how current assessments fit their plans before inventing others.

We believe that the qualities “appropriate, accurate, effective, and equitable” outweigh “comprehensive and thorough.” Selecting a few good assessments for priority goals seems preferable to an assessment plan designating an assessment instrument for every single objective, regardless of its importance. In that light, we hope this guide will help each district write a realistic assessment plan, appropriate to its level of assessment sophistication.

Beginning the Assessment Planning Process

Assessment planning, like curriculum planning, provides context and continuity for district and classroom efforts and ensures that those efforts are part of a larger design. In effective schools, learning progress is monitored closely and results are used to improve instruction. **Montana School Accreditation Standards** require that schools develop a comprehensive and coordinated assessment plan that encompasses both student and program assessment. This guide explores ways to develop an assessment plan that is aligned with curriculum, represents effective schooling, and meets accreditation standards.

Previous Office of Public Instruction booklets in this series have focused on program assessment, student assessment, and assessments for specific curricular areas. Those publications describe many assessment strategies, such as performance assessment, that this guide does not address. Educators should learn how to use the various forms of alternative assessments suggested in these booklets, in educational journals and at assessment conferences and workshops. This learning process will naturally involve experimentation—some false starts, some failures, and some discoveries.

After becoming familiar with all forms of assessment, the next step is to organize selected assessments into a cohesive plan to complement the curriculum guides that resulted from Rule 10.55.603 of the **Montana School Accreditation Standards**. Assessment plans can be approached in different ways—integrated into a curriculum document, printed as appendices to curricular documents, or formulated into documents after the curriculum work is complete. Each of those approaches has several format options. This guide includes three possibilities:

- 1) assessment plans written as lists that outline strategies for each curriculum;
- 2) assessment plans written into matrices that give a visual representation of how the strands of a curriculum are covered by a variety of assessment tools; and
- 3) assessment plans that designate assessment tools for each goal in the curriculum and suggest the collection of these assessments into a portfolio.

Like the curriculum development process, the assessment planning process should be approached in a step-by-step fashion. **The Curriculum Process Guide: developing curriculum for the 1990s** (OPI, 1990) begins with the formation of a curriculum committee. An assessment committee should first be selected. The assessment committee can be composed of members from a curriculum committee, or it can be formed from an interdisciplinary team. In any case, assessment planning should be a cooperative effort of certified staff, trustees, administrators, students, specialists, parents, and community members. Training of the assessment committee(s), at a minimum to establish a common vocabulary, is essential.

Because the underlying “Assessment Philosophy” and “Assessment Policy Statements” are basic to an assessment plan, they are described first in this guide. However, in practice,

the committee may wish to examine curricular outcomes, discuss criteria, and explore a variety of assessment tools before the philosophy and policy statements are solidified.

The importance of developing curricular goals, targets, outcome statements, or content standards before embarking upon the assessment planning process cannot be over-emphasized. District goals provide the framework for examining assessment possibilities.

Assessment Philosophy

Regardless of the way the assessment plan is written, discussing and drafting an "Assessment Philosophy" is an important first step. Since assessment has come to the forefront of many educational debates and is recognized by many as a "lever to crank the system up to higher achievement" (Mitchell, **Testing for Learning**, 1993), books and articles to provide background for the philosophy writing are numerous. Of course, the assessment philosophy should derive from the overall district mission statement. This philosophy statement could be as simple as the following:

Appropriate assessment reflects the educational values that enable students to become effective citizens and supports the belief that students, teachers, and parents are partners in learning. Assessment becomes appropriate, accurate, and equitable when it is a fair measure of the curriculum delivered to students; when it finds the strengths in content, skills, attitudes and thinking characteristic to the entire range of learning styles; when students know the criteria upon which their grades are based; and when results are used to achieve a closer match between learner, curriculum, and assessment.

Or, it could be expanded to include principles, such as these:

Montana's accreditation standards require that schools develop an assessment process for each program area, both to assess student progress and to evaluate programs. The challenge in realizing the spirit of these standards is to match assessment strategies with curricular goals, to determine if the written curriculum is implemented, to find ways to assess objectives in thinking and attitude, and to use the results to improve programs and, ultimately, student achievement. This school district will strive to integrate assessment into instruction, test what is taught, and use the results to improve the teaching/learning process.

To achieve these goals, this school district will:

- *encourage teachers, administrators, and community members to become active participants in the development of local learner goals;*
- *design and/or select assessment procedures that reflect current research, locally developed learner goals, and exemplary classroom practices;*

- *examine different types of assessment and choose those which best match students' classroom learning experiences and growth;*
- *employ authentic demonstrations of learning, such as performance assessments, to make instructional decisions;*
- *develop skills in administering, scoring, and interpreting results of externally-produced and teacher-produced assessment methods;*
- *involve students in assessment decisions, including self-assessment;*
- *develop fair, valid, and thorough student progress reporting; and*
- *use assessment data to improve curriculum, teaching, and student learning.*

To act on a philosophy such as the one above requires a thorough understanding of traditional and alternative assessments. Once the district has agreed upon a philosophy, administration, teachers, and the community must be willing to strive toward the ideals they've set for themselves even though they may require open-mindedness, time and money to achieve. Reading about, training in, and trying out new assessments is an essential part of the process.

Purposes of Assessment

In all phases of education, the primary purpose is to facilitate student learning. The standards define what it is that we think our students should learn, the curriculum gives them ways to learn, and the assessments tell us if they've learned and if we've given them the opportunity to learn. The **Montana School Accreditation Standards** specify two purposes for assessment: to assess student progress toward achieving learner goals and to evaluate programs. Purposes such as "to guide program planning," "to make informed instructional decisions," or "to differentiate curriculum for special learners" are parts of program evaluation. Purposes such as "to provide feedback to learners," "to provide a basis for reporting progress to parents and school personnel," "to determine individual strengths and weaknesses," "to track individual growth," and "to set future learning goals" are parts of assessing student progress. Administrative Rule 10.56.101 requires the reporting of norm-referenced tests because "it is useful to know how Montana students generally compare to students from other states." Imbedded within these purposes is that "the objective of all educational evaluation must be to produce students who can assess themselves" (Mitchell, **Testing for Learning**).

Because assessment is multi-dimensional, this guide uses matrices and tables to help simplify the assessment planning process. A matrix, such as "Table A," can be used in the brainstorming process as assessment planning begins. Within the matrix, check which source of assessment data serves each purpose most effectively and efficiently, or mark each as a primary (P) or secondary (S) source. These purposes and their respective sources of data can then be incorporated into the policy statements or assessment plans.

Assessment Planning: Brainstorming Purposes

[illegible]

NRT: A Norm-referenced test compares a given set of student raw scores to the results of a norming group, designed to be a representative sample of the populations to be compared against. A normal curve has been established for the norming group. Examples include the ACT, SAT, ITBS, CAT, and CTBS.

CRT: A Criterion-referenced test is designed to determine which aspects of the curriculum a student has mastered and which he/she has not. Outcome-based education lends itself to CRTs.

Portfolio: A purposeful collection of student-produced work which serves as evidence of proficiency. Self-reflection is included.

Performance: A performance or project demonstrates achievement for an audience, judged through observation, using preset criteria (a rubric). A performance assessment is a direct assessment of the desired activity. Research assignments, science fair projects, essays, speeches, etc., are examples.

Observation: Record of student work habits, discussions, reading, thinking, etc., recorded in logs or charts by the teacher in an informal classroom environment.

Survey (or questionnaire): A formal self-assessment for determining attitudes, habits, and learning styles.

Other forms of assessment, quizzes, homework, labs, reports, conferences, or teacher-made tests may be included within these categories. The last column is reserved for a form of assessment that may not fit a given category.

Mark P for Primary Source, S for Secondary Source, and N for Not a Source

Assessment Policy Statements

Local school boards should adopt policies establishing student assessment procedures which ensure evaluation of the curricula. Districts establish unique policies that reflect the curricula, the populations, and the needs of their school communities. Through the establishment of guiding principles (philosophy) and a policy, districts can set direction for assessment planning, show commitment to sound assessment, provide a standard for accountability, document decisions, and promote change.

According to Judy Arter and Rick Stiggins of the Northwest Regional Educational Laboratory, an assessment policy could include a general philosophy statement; the purposes for assessment; what will be assessed; constraints and requirements for the use of assessment information; allowances for innovation; competency levels; and a commitment for training and resources. A basic policy statement could look like the following sample.

Sample Policy Statement

- 1) To accurately measure student learning of the local learner goals and to assess program effectiveness require that teachers and curriculum committees develop assessments to match those goals. To assess the student outcomes developed by this school district requires a combination of observation, performance assessments, samples of work, attitude surveys, and ongoing classroom evaluations. Program effectiveness is assessed through standardized tests, portfolios, and follow-up studies.*
- 2) A combination of assessment tools are used in all curricular areas. The key is to match the assessment tools to local learner goals for content, thinking, attitudes, values, and skills examining each tool for its inherent strengths and weaknesses.*
- 3) Teachers, administrators, and curriculum committees:*
 - a) determine what types of assessment tools accurately measure specific student goals;*
 - b) administer assessments to maximize accuracy;*
 - c) use results fairly;*
 - d) designate the primary purpose of each assessment;*
 - e) use assessments for program improvement in curriculum, instruction, and student progress;*
 - f) make assessment a positive tool for students and teachers; and*
 - g) include alternative assessment information in students' permanent records and in reporting to parents.*

- 4) *When considering a student for placement in a special needs program (i.e., gifted and talented, Chapter 1, special education), all assessment data collected are used as part of the decision-making process.*
- 5) *The district provides ongoing inservice and training activities related to assessment issues.*
- 6) *The district plan includes program and student assessment for each program area. This plan specifies how assessment data will be used and competency levels for each districtwide assessment, including portfolios, norm-referenced tests, and district-developed, criterion-referenced tests.*

More specific policies concerning reporting of student progress may also be included in the district policy statements. In this guide, **Developing the Assessment Plan: LISTINGS** represent the kind of extended policy statements described by Stiggins and Arter. Especially adaptable as policy is the section titled **Program Assessment and Public Reporting** which describes a possible plan for assessment that takes place at the district level and includes statements about reporting student progress.

Assessment of Outcomes

The philosophy statements and policies serve as underpinnings for the assessment plan. However, the critical challenge is to “assess student progress toward achieving learner goals including the content and data; the accomplishment of appropriate skills; the development of critical thinking and reasoning; and attitude” (**Montana School Accreditation Standards 10.55.603.5**). Ensuring that the assessments appropriately and effectively measure those goals can be difficult and require that planners clarify their learner goals (outcomes) and match their assessments to those goals.

Clarifying Learner Goals

Generally, assessments are designed to measure the attainment of educational outcomes and curricular goals. A district's outcomes should be used to define what it means to be academically successful. As these learner goals or outcomes are examined for clarity, some rewording may be necessary in order to ensure that they are assessable concepts.

Example

The Model Learner Goals found in Appendix A of the **Montana School Accreditation Standards** are actually worded to facilitate the examination of a school's program rather than for student assessment. For example, the Communication Arts Model Learner Goals begins with the general goal, "In the study of languages, students shall be given the opportunity to learn how languages function, evolve, and reflect cultures." To evaluate that goal in a communication arts program, one would look for aspects of the curriculum generally referred to as linguistics. The third assessment plan option in this guide, **GOALS-BASED PORTFOLIOS**, culminates in a program assessment for which goals written in the form of the Model Learner Goals work well.

However, when designing a student assessment plan, this kind of statement should be revised into a student outcome at the knowledge level. It could read, "Students will know how languages function, evolve, and reflect cultures." Luckily, the Model Learner Goals further clarify this outcome into primary, intermediate and upon graduation outcomes with more specifics. Therefore, a more easily assessable outcome is found under English Language Model Goals: Primary: "By the end of the primary level, the student recognizes that people label objects and ideas with words and words whose meanings change over time and through usage." This is a learner goal that can be tested.

As in all subject areas, the Communication Arts Model Learner Goals contain outcomes that focus on content (knowledge), skills, attitudes, and thinking. Although a written test may be an appropriate assessment for the example goal above, others may require alternative forms of assessment. For example, the goal "By the end of the intermediate level, the student will be able to respond to, revise, and edit his/her own and others' writing" lends itself to the use of a portfolio containing samples of rough drafts and revisions.

Matching Assessments to Goals

After the outcomes have been clarified as student goals, assessment committee members should determine which assessment methods lend themselves to each of the goals. Some districts may currently be assessing many of their outcomes adequately. Other districts may need to develop appropriate assessment strategies. To achieve this match, locally-developed curriculum guides should be used to answer the following questions, repeating questions one through four after each:

1. Are you presently using this strategy?
2. How do you record the results of those assessments?
3. How do you use these results?
4. Could you use a more appropriate method?

- A) Which outcomes can be assessed using norm-referenced tests?
- B) Which outcomes can be assessed using teacher-made objective tests?
- C) Which outcomes can be assessed through teacher observation?
- D) Which outcomes would require a performance by students?
- E) Which outcomes could be assessed by a student product, such as a written sample?
- F) Which outcomes would a collection, showcase, or portfolio best assess?
- G) Which outcomes must be assessed through a survey or interview?
- H) Which outcomes cannot be directly assessed, but can only be evaluated through follow-up studies, college records, community statistics, job placement, etc.?

This activity may uncover some gaps in the present assessment system. If the only appropriate way to assess a particular outcome is through a performance assessment, the district may want to design a task and develop criteria by which to judge a student (or group) performance. In addition to the OPI publication, **Student Assessment: keys to improving student success**, many publications and performance assessment workshops are available to provide information and training on this topic. The Northwest Regional Educational Laboratory is an excellent resource for training in performance and portfolio assessment.

Options for Developing Assessment Plans

At this point in the assessment planning process, the assessment committee should have drafted a philosophy statement and policies, brainstormed the purposes for each type of assessment, clarified learner outcomes, and outlined how various outcomes can be assessed most effectively. With this background work completed, the actual development of an assessment plan can proceed. Three options, of increasing complexity and usefulness follow. The first option is provided for districts that are new to the assessment arena or schools with limited time and resources. As the district becomes more knowledgeable about assessment, parts of the second and third options can be incorporated into this plan. The last option provides a methodology that may challenge even the most sophisticated districts, but one that will eventually, we hope, provide all the pieces to the assessment puzzle.

Developing An Assessment Plan: LISTINGS (Option One)

District assessments yield aggregate data which can be used to evaluate programs and to report results to the community. Even before assessment plans are developed for each of the curricular areas, a district-level assessment plan can be formulated. On the simplest level, the district assessment plan could resemble a list of policy statements, such as the following:

Example: Program Assessment and Public Reporting, District Level

- 1) *This district uses the Iowa Test of Basic Skills at grades 4, 8, and 11. Test results in areas that match curriculum goals are examined for trends, identification of strong and weak areas, and analysis of curriculum implication. Results of these examinations and analysis are reported to parents and the public.*
- 2) *This district conducts a discipline-based writing assessment for grades 5, 9, and 12. Topics are derived from social studies, science, mathematics, the arts, and health enhancement. The scoring process involves as many teachers as possible, using "Guidelines for Writing Assessment in District X." Scores are reported to parents and to all teachers on an individual and districtwide basis. Results are used to examine the program.*
- 3) *Follow-up studies are conducted of students after the end of grades 5, 8, and 12. Through random samplings, at least 20 percent of the students from each group are asked to fill out questionnaires designed by curriculum committees which are then used for program evaluation.*
- 4) *An analysis of the results of classroom assessment is used in each of the curricular areas for program improvement.*
- 5) *Narrative report cards are used for grades K-4. Thereafter, grades A, B, C and Incomplete are assigned using "District X Criteria for Assigning Grades."*

Plans and policies such as the preceding samples abound. However, assessment planning beyond statements about standardized testing, final exams, and grading policies is less common. **Student Assessment: Classroom Level** represents a simple way to write a student assessment plan. Its components are primarily designed, administered, and scored by the classroom teacher, although planning will be a cooperative effort of the teachers, students, administrators, and parents. In the following sample, several program areas have specified methods that the sample district will use to evaluate student progress.

Example: Student Assessment, Classroom Level

COMMUNICATION ARTS includes:

- 1) *the collection of reading/writing portfolios beginning in kindergarten. Teams of teachers will score these portfolios during the spring of the students' third, seventh,*

and tenth grades, using guidelines found in the "Portfolio Assessment Program for District X."

- 2) the assessment of student performance in different reading situations, such as reading for literacy experience, reading for information, and reading to perform a task; using a variety of strategies, such as interviews, conferences, reading logs, dialogue journals, selected daily work, checklists, unit projects, think-alouds, observation, cloze procedures, informal reading inventories, interest inventories, parent response logs, and student self-evaluation.
- 3) the assessment of oral language skills through the district's "Speaking/listening Checklist" and a student log of oral performances.

FINE ARTS includes:

- 1) process-folios to capture the steps and phases through which students pass in the course of developing a project, product, or work of art. A complete student process-folio contains initial brainstorming ideas, early drafts, and first critiques; journal entries on "pivotal moments" when ideas jelled; collections of works by others that proved influential or suggestive, in a positive or negative sense; interim and final drafts; self-critiques and critiques by peers, in formed mentors, and, again, outside experts; and finally some suggestion of how one might build upon the current project in future endeavors.
- 2) attitude and belief inventories and questionnaires to be administered to students during grades 3, 6, and 10. The inventories and questionnaires will be scored based on the "Assessment Guidelines for Attitudes and Values in District X."

HEALTH ENHANCEMENT includes:

- 1) the collection of portfolio information from those areas formerly called "physical education" and "health education" beginning in kindergarten and including both qualitative and quantitative data. These will be reviewed at the completion of the primary, intermediate, and high school levels for achievement comparison with the district's learner outcomes for Health Enhancement.
- 2) the assessment of knowledge, attitude and thinking ability as they relate to the areas formerly called "physical education" and "health education" through the use of mutually agreed upon teacher-designed knowledge tools and standardized attitude tools. Thinking skills will be assessed through teacher observation utilizing agreed upon criteria.
- 3) the assessment of physical and mental (thinking) skills as they relate to the curriculum through observation checklists designed by the district and/or standardized skill tests agreed upon by the department.

- 4) *the use of the Montana Youth Risk Behavior Survey or other comparable instrument at junior and senior high levels to determine health-related attitudes and behaviors for program assessment and long-term observation of student attitude and behavior change.*

MATHEMATICS includes:

- 1) *the assessment of effective communication, learning behaviors, and mathematical topics.*
- 2) *performance tasks including projects and investigations, open-ended questions, observations, interviews, conferences, and mathematical portfolios.*
- 3) *teacher, self, and peer assessment strategies.*

SCIENCE includes:

- 1) *converting science hands-on activities and laboratory investigations into performance assessment instruments.*
- 2) *broadening the assessment of knowledge to go beyond factual recall and to include principles, theories, concepts, themes, models and systems, etc.*
- 3) *bringing the assessment of thinking, skills and attitude onto a par with knowledge.*
- 4) *the reconsideration of grading and reporting systems that will address educational equity, integration, student outcomes, interdisciplinary components, and curricular integrity.*

SOCIAL STUDIES includes:

- 1) *the collection of student portfolios beginning in kindergarten. The material will be reviewed at the beginning of grades 2, 5, 8 and 12. Portfolios may include such things as: group assignments and team ideas, student writings, reflections, journal entries, reactions, and feelings; problems and investigations; rough drafts and finished products; creative expressions (art, audio and videotapes, and photographs), and teacher comments and assessments; self-assessments; teacher observations, and progress notes written by the teacher and student. The portfolios are evaluated on the following criteria: evidence of critical and creative thinking, quality of activities and investigations, variety of approaches and investigations, and demonstration of understanding and skill in situations that parallel previous classroom experience.*
- 2) *the assessment of knowledge, skills, thinking, and attitudes and values relating to history, geography, economics, political science, sociology, anthropology, and psychology.*
- 3) *assessment tools which incorporate inquiry, decision-making, and problem-solving*

skills, require integrating and synthesizing knowledge of concepts, and real-world applications.

Summary of LISTINGS Option

Although this example provides a basic framework for an assessment program and represents an assessment plan that meets accreditation standards, connections to curricular goals and competency levels are missing. However, this type of plan could be expanded and refined to include elements found in the following sections.

Developing An Assessment Plan: MATRICES (Option Two)

Because assessment plans must reflect at least two dimensions, designing a matrix provides a useful visual representation of an assessment plan. The two dimensions (the labels for the rows and columns) could consist of the type of assessment and the subject area; the purpose of the assessment and the curricular goal; the method of assessment and the outcome category; or the evaluator and the strand. Matrices B through F illustrate the use of some of these dimensions as variables and could be modified to fit individual district needs. The creative use of matrix overlays might provide a third dimension and further clarify how the assessment scheme fits together. For example, in the Mathematics Assessment Plan, Matrix F, one matrix suggests assessment instruments and one suggests the evaluator.

Other Student Assessment Matrices are described and provided in **Student Assessment: keys to improving student success** (Office of Public Instruction, 1993) and in the **Science Assessment Toolkit** (OPI, 1993). Such matrices can easily be designed for all subject areas.

Summary of MATRIX Option

The advantage of the matrix as an assessment plan is that it shows two dimensions of assessment at once and it also provides a way to compare and contrast different assessments. As with the LISTINGS Option, however, criteria for evaluating outcomes would need to be developed separately.

Visual Arts Assessment Plan

	Written Activities	Performances & Production	Observations & Conferences (checklists & narratives)
Creative Expression & Design	Process folios (to determine working knowledge of materials), Demonstration, Teacher and/or Student Journals, Vocabulary Checklist	Portfolio (may contain completed project, self-assessment, sketchbook, notes, drafts, ideas for new work, personal statements, and audio or video tapes)	Demonstration and/or Art Education Practices Checklist, Interview, Student Display, Audience Evaluation, Peer Evaluation, Summarize Impressions
Cultural Heritage	Journals, Assessing Knowledge, Historical Writings	Portfolio	Aesthetic Scanning, Class Discussion, Summarize Impressions
Aesthetics	Aesthetic Writings, Journals, Questionnaires, Survey	Portfolio	Aesthetic Scanning, Class Discussion, Debate, Summarize Impressions
Art Criticism	Critical Writings, Journals, Questionnaires, Survey	Portfolio	Aesthetic Scanning, Class Discussion, Debate, Summarize Impressions

Communication Arts Assessment Plan

	Paper & Pencil Tests and Activities	Performances	Observations & Conferences (checklists & narratives)
Reading	CTBS (grades 4, 8, 11)	Holistic Criteria for Judging Narrative and Expository Retellings	Reading Development Checklist, Sample Guidelines for Observing the Reader
Literature	Dialogue Journals	Metaphorical Poetry	Assessing Literature Discussions
Writing	Writing Assessment Analytic Scoring Guide	Portfolio Criteria, Evaluating Writing	Continuum of Written Language Development, Status of the Class, Evaluation Conference Notes, Self-Reflection
English Language	Assessing Language Skills	Word Journal	
Speaking		Speech Evaluation Form	Speaking Self-Evaluation, Oral Summary of an Interview: Self-Assessment
Listening		Checklist: Interview Assessment	Listening Self-Evaluation, Class Discussion Rating Scales
Media	Model for Analyzing Entertainment	Assessing Media Skills	Assessing Multimedia Presentations
Thinking	MAT Test	Assessing Completion of Complex Tasks	Assessing Improvement in Student Thinking

Health Enhancement Assessment Plan

	Paper & Pencil Tests and Activities	Performances	Observations & Conferences (checklists & narratives)
Physical Fitness	Exercise and fitness knowledge tests	Fitness tests	
Activity Skills	Safety precautions Rules, Strategies	Skill tests, Performance ratings, Videos	Game, Practice, and Skill Checklists
Health Knowledge	Teacher tests Standardized tests	Speech ratings Interview score sheet	Class Q and A log Discussion journal
Attitude Toward Health Enhancement	Surveys	Role playing checklist Discussion journal Speech evaluation	Self-evaluation Observation checklist Class discussion Rating scale
Health Skills	Confidence surveys	Role playing video	Self-appraisal worksheet
Thinking Skills	Teacher tests Surveys	Game checklist Performance video or checklist	Discussion journal Self-reflection

Evaluator Role Assessment Plan

Aesthetic Curriculum

	Self (Student)	Teacher	Community
Creative Writing	Self-reflection Narratives	Analytical Scoring of Writing Samples	Publications Writing Contests
Drama	Journals, Critiques, Peer Evaluations	Tests, Observations, Checklists	Performances Reviews
Dance	Logs	Observation	Performances Recitals
Visual Arts	Portfolios	Analytical Scoring of Pieces, Tests	Exhibits, Reviews

Mathematics Assessment Plan

How is the evaluation done?

What instrument is used?

	Written Tests and Activities	Performance	Observation/Conferences
Problem Solving	Present Solutions, Explain Process, Solve Word Problems	Open-ended Problems, Extended Problem Solving	Checklist of Problem-Solving Solving Skills
Communication	Journals, Portfolios	Presentations	Checklists, Anecdotal Records, Video Tape Groups
Reasoning	Journals, Teacher-Made Tests, Explain Word Problems	Solve Problems, Justify Solutions	Questioning, Checklists, Interviews

The use of two matrices can provide a three-dimensional assessment picture.

Who does the evaluation?

	Student (Self)	Teacher	Community/Other
Problem Solving	Determine Reasonableness of Results, Document the Problem-Solving Process	Checklist of Skills, Open-ended Problems, Extended Problems	Real-life Problems, Projects (e.g., Science Fair), On-the-Job
Communication	Goal Setting, Self-Reflection, Journal Writing	Presentations, Journals, Observation	Presentations, Group Projects, Open-house, Portfolio Parties
Reasoning	Explain Reasoning to Peers, Self-Questioning	Teacher-Made Tests, Explanation of Process, Word Problems	Mathematics Contests, Decision Making

Developing An Assessment Plan: **GOALS-BASED PORTFOLIOS (Option Three)**

Districts may need up to four years to fully implement an assessment plan using this option. Although a full school year could be spent on each step, progress to step three could be achieved in one year if teachers are already experimenting with alternative forms of assessment. This curriculum-based assessment plan culminates in organized evaluations based on samples of alternative and traditional assessments.

Step One: EXPLORING ASSESSMENT TOOLS

Basically, step one consists of experimentation with a variety of assessment tools. Teachers who attend training sessions and conferences share a variety of assessment tools available to colleagues. Staff members try assessments such as those found in OPT's **Student Assessment: keys to improving student success** or **Communication Arts: Student Assessment Appendix II**. The district *policy statement* or *principles of assessments* should help guide teachers as they individually begin using alternative assessments with some frequency. During this exploratory stage, the principles of appropriate assessment are followed, but high-stakes decisions about students or programs are not made based upon results.

Strategies such as the following are practiced: *The results of observations and judgements of performances and products (as well as paper and pencil tests) are recorded and used to evaluate student progress. Care is taken to design tests and quizzes that not only reflect the curriculum, but also balance questions that require a range of thinking levels—recall, application, analysis, synthesis, and evaluation. Process is assessed, as well as product. The results of standardized tests are used as one indicator for student placement and curricular reform based on observation of district results over time.*

Staff development, attendance at conferences and workshops, and concentrated reading and research on the topic of assessment should be pursued while this period of assessment exploration is taking place. Performance assessments may also be piloted and anchors selected or standards set for these performances. Risk taking is encouraged and acceptance of failure, as well as positive discoveries, is essential.

Step Two: ESTABLISHING CONSISTENCY

This step is designed to partially standardize the assessment practices within a district. In this step, the assessment tools that were found to be effective, appropriate, and efficient during the assessment exploration step are selected. Teachers and administrators

purposefully designate some of these types of assessment instruments, or even particular assessment tools, to fulfill the assessment requirements for curricular strands or general goals. For example, *all juniors include a research paper in the portfolio to illustrate their ability to research and present information and to organize and write in the expository mode.* These assessments will be included for all students at designated grade levels and for specific purposes. Self-reflection by the students about the pieces that are included may be required components of the portfolios. Performance assessments developed by the district may validate several outcomes, perhaps in more than one curricular area. As a result, students and teachers throughout the district become familiar with some alternative assessments (including self-assessment) and understand their roles as a part of reporting student progress and examining programs.

Selecting a few specific assessment tools as part of the assessment plan does not, however, preclude other assessment tools from being used individually in the classroom. An assessment tool such as self-reflection may actually be as useful for instruction as it is for assessment. Therefore, while classroom assessment tools remain individualized to reflect specific classroom activities, district assessment plans selectively implement certain tools to achieve the kind of standardization that ensures equitable assessment for students across classrooms, schools, and grade levels.

The results of standardized tests may be used to analyze achievement of some of the curricular goals. These tests should be carefully analyzed in terms of how well they match delivered curriculum and which batteries yield scores important to the district curriculum. Selected standardized test results may be compared from year to year to measure progress on specific goals, assess changing methods or materials, or give insight into district practices and policies.

Documentation of this plan could be written out in a listing format or it could resemble the matrices described in Option Two.

Step Three: COLLECTING PORTFOLIOS

Portfolios have become increasingly popular as assessment devices. However, their purposes vary widely. They can be used for instruction, self-reflection, placement, parent conferences, grading, alternative credits, program evaluation, college entry or employment, etc., ranging from relatively unstructured collections of student learning to carefully designed documentations of achievement. In fact, Ruth Mitchell, in *Testing for Learning*, lists 35 uses for portfolios. But she warns that "portfolios should be handled with care, precisely because they seem to be all things to all situations" (p 313).

Portfolios can be used effectively on several levels and for either formative or summative evaluation. A "working portfolio" provides a repository for the bulk of student work. In a classroom portfolio designed for student assessment, pieces are purposefully selected (primarily by the student) and reflected upon to show student progress and help students,

teachers, and parents make decisions. In a district-level portfolio designed for program assessment, pieces must be selected to align with curriculum. In any case, the purpose of the portfolio dictates its selection criteria and size.

Therefore, when designing a portfolio, first determine its purpose. If its purpose is to track student progress, decide which learner goals will be assessed, what samples or products can demonstrate achievement of those goals, and what criteria will be used to evaluate the contents. If the primary purpose of a portfolio is to teach students to monitor their own learning, their selection of samples will be less important than their self-reflections and the criteria for judging will describe abilities to select, see one's own strengths and weaknesses, and set goals. These kinds of classroom portfolios are extremely valuable and can be used in conjunction with, or as subsets of, the Goals-Based Portfolios described in steps three and four of this assessment plan. The simplest way to begin using portfolios is to focus on one purpose. The primary purpose of the portfolio for which the sample tables were designed is **to ensure that students are given opportunities to meet their learner goals.**

In this third step, teachers administer and collect the assessment tools designated in step two. Ideally, a portfolio of these assessments is kept for one or more curricular areas containing selected products, records of observations, ratings of performances, self-evaluations, and narratives. Within each portfolio, a record-keeping device, such as the curriculum-labeled Portfolio Summaries (Tables G-L), indicates what type of assessment instrument is included to show progress toward each curricular goal, or simply to show that students engaged in activities related to each goal. The Portfolio Summaries included in this guide are based on the Model Learner Goals written by Project Excellence and included in Appendix A of the **Montana School Accreditation Standards**, model curriculum guides published by the Office of Public Instruction, or national standards.

To use tables such as the Fine Arts Portfolios Summary (G), teachers simply write in the name of the assessment instrument, or a description of that instrument in the blanks opposite each curricular goal. By the end of the collection period, most of these blanks should be completed.

To use those tables with multiple columns (such as Table H), first write the names of the assessment instruments chosen in step two in the columns along the top. For example, "written sample, test/quiz, checklist, narrative, performance rating scale, log/journal excerpt, NRT" could be written in those vertical columns as seen in the Communication Arts sample. Then each box is marked with the date of entry or perhaps a chronological number in the horizontal column of the goal(s) that tool assesses. As this portfolio is passed from one grade to the next, an effort is made to include assessment samples for goals that have not yet been assessed. A communication arts portfolio could contain up to 40 entries by the end of the primary level (third grade). It's possible to collect fewer entries because some assessments can conceivably show student progress in more than one goal. As more thematic or interdisciplinary projects are used, fewer assessment instruments would be necessary, because in general such projects can be used to evaluate several different goals.

Fine Arts Portfolio Summary

DRAMA

The student shall have had the opportunity to . . .	Assessment Device	MET
By the end of the primary level:		
Understand how movement, sound, and setting convey emotions and meaning in short dramatic performances.	Written review	
Recount emotional and sensory responses to a dramatic activity as a listener and viewer.	Journal	
Identify body, voice, costume, and make-up as elements of characterization.	Teacher test	
Understand the daily-life sources of dramatic art: story, character, and conflict.	Writing sample—skit	
Express original interpretations of ideas and objects through the use of dramatic elements in a solo or group performance.	Performance	
Use pantomime, puppets, or other dramatic devices to express individual interpretations of ideas, concepts, objects, or familiar stories.	Photos	
Enjoy and appreciate a variety of dramatic selections and experiences.	Survey	
By the end of the intermediate level:		
Identify historical, cultural, and environmental elements in a variety of dramatic works.	Test	
Apply knowledge of dramatic principles and techniques to enhance enjoyment of reading and viewing dramatic works.	Critique	
Understand plot, character, setting, and theme.	Essay test	
Recognize the expressive and technical qualities of dramatic work through study, interpretation, and enactment in planned and improvised solo or group presentations.	Performance	
Evaluate a variety of dramatic works.	Journal entry	
Upon graduation:		
Identify artistic choices made in a variety of theatrical forms in order to produce specific effects.	Review	
Appreciate a variety of written drama and theatrical productions, including live and recorded performances.	Journal	
Apply knowledge of dramatic concepts, elements, principles, theories, and processes to the viewing, performing, and critiquing of dramatic presentations.	Performance	
Demonstrate knowledge of the principles of drama by participating in a variety of theater productions.	Log/diary	
Understand the social, cultural, educational, and historical functions of drama.	Essay test	
<p>To use this table, the curriculum/assessment committee determines which assessments will be used consistently across the district for each of the listed goals. These strategies are then written into the table. When the portfolio is checked at the end of each level, MET is checked if the raters feel that this goal is adequately represented by the piece included in the portfolio. Teachers continue to use a variety of unique and individual activities and assessments in their own classrooms in addition to those few that are selected by the district committee for the program assessment portfolio. Student assessment will have already been accomplished by the teacher through the grading or rating of the pieces at the time of the activity.</p>		

Communication Arts Portfolio Summary

Student Name _____ Date _____

By the end of the primary level, the student shall have had the opportunity to:

WRITING:

Write frequently, using varied formats for a variety of purposes and audiences.

Recognize how spelling, punctuation, capitalization and handwriting contribute to meaning in writing.

Understand how to generate and organize ideas and how to create a clear written message.

Respond to, revise, and edit his/her own and others' writing.

ENGLISH LANGUAGE:

Recognize that people label objects and ideas with words and that words and their meanings change over time and through usage.

Recognize that groups of people use different pronunciations and word choices to refer to the same objects and ideas.

Recognize that language changes to accommodate subject, audience, and purpose.

THINKING:

Begin to demonstrate thinking skills such as comparing, contrasting, inferring and evaluating in both verbal and nonverbal communication.

Respond to an experience by creating an action (pantomime, picture, poem, or story) to express understanding.

Express associative thinking as well as creativity and inventiveness.

To use this table, the curriculum/assessment committee determines the categories of assessment tools that will be used consistently across the district. As items are put into the portfolio, a reference code (such as the date) is written into the square across from the goal that was assessed and under the type of assessment.

Communication Arts Portfolio Summary

Student Name _____

Date _____

By the end of the intermediate level, the student shall have had the opportunity to:

WRITING:

Write frequently, using varied formats for a variety of purposes and audiences.

Understand and use spelling, punctuation, capitalization, handwriting, and usage to improve effectiveness in writing.

Select a topic, generate and organize ideas and choose appropriate language for his/her writing purpose.

Respond to, revise, and edit his/her own and others' writing.

ENGLISH LANGUAGE:

Understand that words are arbitrary, culturally-based symbols for objects and ideas with words change over time and through usage.

Recognize that people gain identity through their language, including pronunciation, word choice, and nonverbal communication.

Analyze the ways that language changes to accommodate topic, audience, and purpose.

THINKING:

Respond to and evaluate intentions and messages of speakers, writers, presenters, and media.

Differentiate between fact and opinion, recognize logical/illogical sequences, create an hypothesis, and predict outcomes.

Expand creativity, inventiveness, and logical/critical thinking.

Communication Arts Portfolio Summary

Student Name _____ Date _____

Upon graduation, the student shall have had the opportunity to:

WRITING:

Write frequently, using varied formats for a variety of purposes and audiences.

Use spelling, punctuation, capitalization, handwriting, and usage effectively and purposefully.

Focus the purpose of writing, visualize the audience, and refine the language of his/her writing.

Respond to, revise, and edit his/her own and others' writing.

ENGLISH LANGUAGE:

Understand that words have denotative and connotative meanings and that oral, written, and nonverbal languages incorporate nuances of meaning.

Know the history of the English language as well as the principle of linguistic change.

Refine his or her analysis of the ways languages change to accommodate topic, audience, and purpose and evaluate the effectiveness of such changes.

THINKING:

Respond to, interpret and evaluate intentions and messages of speakers, writers, presenters, and media.

Evaluate the validity of assertions and detect fallacies in reasoning and in emotional appeals; differentiate between subjective and objective viewpoints.

Use higher-level thinking processes to solve problems in the everyday world.

To use this table, the portfolio review committee uses items in the portfolio to determine whether or not the student has had the opportunity to meet the listed goal. Developing criteria describing each quality is advised.

Districts that have a written curriculum for each grade level may prefer to select certain key goals for each grade level for which data will be collected and review the portfolios on a yearly basis. Regardless of the length of the collection period, the advantage of using this method to gather a portfolio is that the curricular goals must be revisited periodically and a variety of assessment methods must be employed.

Another way to collect these portfolios is through the random sampling method. Instead of collecting a portfolio for every student, a composite portfolio can be collected for each class. Or, selections can be made from the existing portfolios of individual students. Every student should be represented in this portfolio, but rather than serving the purpose of showing that every student has had opportunities to learn each of the curricular goals, it serves the purpose of showing that these opportunities have been offered in every classroom.

Step Four: EVALUATING THE PORTFOLIOS

At the end of each level—primary, intermediate, secondary—a committee analyzes the portfolios, once again using a device such as the Portfolio Summary (Tables J-M). This time, however, the matrix is used as a rating scale. In those slots across the top, words such as “met” and “not met,” “proficient, developing, not yet,” letter grades, or numbers could be written. Reviewing the portfolios should be a joint effort of teachers, administrators, community members, parents, and students, if possible. All parties will come to have a better understanding of the curricular goals and the usefulness of the various assessment instruments.

In order to make judgments about the portfolios, criteria must be set. The complexity of the rating scale selected influences the criteria. If each of the goals will simply be checked as “met” or “unmet,” the development of criteria is not complicated. For a simple program assessment portfolio with the primary purpose of ensuring that students are given opportunities to meet their learner goals, an elaborate rating scale is unnecessary. “Met” or “unmet” will suffice. A numerical score for the portfolio could then be assigned by percentage. For example, if an acceptable sample is included in the portfolio for 18 of the 20 goals, the student has scored 90 percent.

Several options are available for more complicated portfolio purposes. If the individual pieces have already been evaluated with letter grades, rating scales, or scores, then a score for the entire portfolio could be assigned using conversion tables. Judgments can be made about how well each curricular goal is being met for each student and marked in the boxes. Of course, criteria describing the characteristics of a high, medium, and low performance on each goal must then be developed. A sample of that type of criteria is titled “Goals-Based Criteria for Writing Portfolios” (Table N). Care must be taken to note the date of each entry so that the evaluations are developmentally appropriate. The end result may be a list of goals that each student has not met or scored low. That list would then be sent to the teachers at the next level, who begin providing more opportunities for the student to achieve those goals.

Visual Arts Portfolio Summary

Primary Level

Student Name _____ Date _____

By the end of the primary level, the student shall have been given the opportunity to:									
Identify and use the elements of art and principles of art in organizing for personal expression.									
Experience the sense of accomplishment and pleasure from the creative act.									
Use appropriate vocabulary to describe the expressive qualities of a variety of works of art.									
Begin to recognize different works of art and identify artists, placing them in a historical time and place.									
Be familiar with and appreciate the various sources of art in the community (museums, galleries, public places).									
Begin to recognize universal emotions and experiences expressed in selected visual images.									
Learn to appropriately select and to care for a variety of art materials, media, and tools.									
Enjoy and appreciate a variety of art works.									

Visual Arts Portfolio Summary

Intermediate Level

Student Name _____ Date _____

By the end of the intermediate level, the student shall have been given the opportunity to:

Observe the sensory and formal applications used by artists.									
Identify art processes, forms, and materials from many cultures and historical periods.									
Appreciate art in a variety of settings (home, community, classroom, and studio).									
Identify materials, tools, and techniques used by artists for expressive purposes.									
Understand the elements and principles of art used by the artist to express creative ideas, moods, and feelings.									
Know the vocabulary required to describe the sensory, formal, technical, and expressive qualities of art.									
Understand the role of galleries and museums in preserving and transmitting art heritage and contemporary culture.									
Discover and discriminate among the methods of expressing imagination, interpreting experience, and selecting materials and techniques.									
Demonstrate the ability to solve visual and technical problems in art.									
Analyze, compare, contrast, and distinguish art work from a variety of styles and periods using formal viewing criteria.									
Experience a sense of accomplishment and pleasure from experimentation, innovation, and skill development.									
Identify different works of art from distinct cultures and historical and stylistic periods.									

Visual Arts Portfolio Summary

High School Level

Student Name _____ Date _____

If offered at the secondary level, the course of study in visual arts shall give the student an opportunity to:

Recognize the processes, forms, and materials used to produce a variety of art.

Use principles of visual discrimination in assessing the aesthetic properties of natural and artificial objects and environments.

Apply the vocabulary required to describe the sensory, formal, technical, and expressive qualities of art.

Understand the value of original works of art by experiencing them in a variety of settings.

Recognize factors that influence artists' choices of forms, style, content, and artistic intent.

Understand the importance of preserving and transmitting art heritage, and the accompanying responsibility of museums, galleries, and scholars.

Understand the significance of major art works in embodying the spirit of a culture of a historical period.

Understand the processes, equipment, and materials needed for various visual arts.

Exercise self-direction in independent problem solving (visual, conceptual, technical) to art works with complex content.

Create art, demonstrating the creative and innovative use of equipment, materials, techniques, and technology.

Experience a sense of accomplishment and satisfaction with his/her ability to conceive, execute, evaluate, and present a finished creative work.

Develop aesthetic criteria based on elements and principles of art and analyze the effectiveness of the components of works of art in achieving the artist's intent.

Develop criteria for judging the cultural and historical significance of works of art.

Appreciate and enjoy art works from a wide range of cultures and historical and stylistic periods.

Goals-Based Criteria for Writing Portfolios

Level: Intermediate

Collection Period: Grades 6-8

Purpose: To document achievement of two writing learner goals

GOAL: Students will write for a variety of purposes and audiences

Standards of Performance

- | | |
|------------|--|
| Complete | <ul style="list-style-type: none">• purposes include persuasion, narration, reflection, description, comparison/contrast, and instruction• formats include poetry, letter, story, journal entry, and drama• audiences include teacher, peers, parents, self, and community |
| Partial | <ul style="list-style-type: none">• 4-5 different purposes are represented• portfolios show some diversity• audiences are limited to teacher and assigned outside parties |
| Inadequate | <ul style="list-style-type: none">• only 2-3 purposes are included• formats are repetitive• audience is exclusively teacher |

GOAL: Students will respond to, revise, and edit their own writing

Standards of Performance

- | | |
|------------|--|
| Complete | <ul style="list-style-type: none">• drafts and completed works show extensive revision, including word choice and organization• drafts and complete works show careful editing• self-reflection shows understanding of quality writing and concrete details about strengths and weaknesses |
| Partial | <ul style="list-style-type: none">• drafts and completed works show some revision, including word choice• drafts and completed works show some editing• self-reflections provide at least a superficial analysis |
| Inadequate | <ul style="list-style-type: none">• little revision is evident between drafts and final papers• numerous mechanical errors remain in final papers• no or rudimentary self-reflection is included |

The Model Learner Goals are divided into three levels, as shown in Tables O, P, and Q. Primary ends with the third grade, intermediate ends with grade eight, and secondary ends with graduation from high school. Local districts may want to split the primary and intermediate levels into subsets that more closely reflect their school structures, as in Tables R, S and T, (or into primary, intermediate, middle school, high school) and conduct their reviews at the end of each of these levels. Evaluating portfolios on a yearly basis is another possibility.

Using the GOALS-BASED PORTFOLIO for Outcome-based Education

Districts with 20 or more goals in each curricular area may find the GOALS-BASED PORTFOLIO overwhelming for student assessment unless they concentrate on only a few priority goals. Outcome-based education, however, allows these portfolios to focus on student assessment rather than program assessment. Districts that have developed a few broad outcomes for all students may want to explore the possibility of using those exit outcomes as the goals for which the assessment pieces are collected. In this case, the bulk of the student work collected in the portfolios may be projects that cross subject areas. For example, suppose one of the exit outcomes is that students will be "citizens who contribute time, energy and talents to help improve the way of life in their local community and global environment" (Northeastern Montana Curriculum Consortium). To demonstrate attainment of this outcome, students might include excerpts from work logs or journals and pictures or descriptions of their community-based projects.

For purposes of transition, criteria must be formulated which describe the characteristics of full, partial, and incomplete understandings/skills in relation to each of the outcomes. The portfolios would be evaluated based upon those criteria. Students should know the standards of performance before they embark on these projects and put together their portfolios. The standard of performance is the score or percentage of the criteria that students must satisfy in order to meet the outcome (pass, graduate, or "get an A," depending upon what stakes are attached to this portfolio).

Summary

As with curriculum development, assessment planning is a process that should involve teachers, administrators, students, and parents. It is a process that ultimately translates a vision into a written document whose form and content reflect the needs and philosophy of the district. The samples and steps suggested are designed to guide school district personnel as they move through their own assessment planning.

Health Enhancement Portfolio Summary

By the end of the primary level, the student shall have had the opportunity to:

KNOWLEDGE:

Identify roles, responsibilities, contributions, and life cycles in a family structure.

Identify the difference between use and abuse of drugs and their effects on an individual's total development.

Identify safety hazards, causes of accidents, and preventive measures for disease control.

Identify human body parts and systems, emphasizing individual uniqueness.

Identify food combinations that provide a healthy and balanced diet.

Identify potential sources of pollution and pollution's harmful effects.

Identify resources which help promote and maintain community health.

SKILL:

Demonstrate a variety of perceptual, motor, and rhythm skills, including but not limited to throwing, catching, kicking, striking, balancing, creative movement and folk dance, and skills related to lead-up games.

Demonstrate an appropriate level of physical fitness in cardio-respiratory function, body composition, and musculoskeletal performance.

ATTITUDE:

Identify components of wellness and describe how decision making affects personal health practices.

Identify ways in which advertising influences personal health choices.

BEHAVIOR/THINKING SKILLS:

Develop positive interpersonal relationships and self-concepts.

Health Enhancement Portfolio Summary

By the end of the intermediate level, the student shall have had the opportunity to:

KNOWLEDGE:

Understand substance use and abuse and their effects on the individual and society.

Understand health problems, including diseases and their etiology, the identification of symptoms of a variety of health problems, and prevention of health problems and injuries.

Understand the functions and maintenance of body systems, including knowledge of the reproductive system.

Understand basic nutrition and its application.

SKILL:

Demonstrate a variety of physical skills that influence individual physical development, including but not limited to skills practice and lead-up games, rhythms and dance, and individual, dual, or team sports.

Demonstrate an appropriate level of physical fitness in cardio-respiratory function, body composition, and musculoskeletal function.

ATTITUDE:

Demonstrate an ability to identify roles, responsibilities, contributions, and life cycles in a family structure.

Understand the need for and use of consumer health services and products.

Understand cultural, environmental, social, and ethical issues which affect healthy lifestyles.

Understand interrelationships between physical health and mental well-being.

BEHAVIOR/THINKING SKILLS:

Demonstrate positive interpersonal relationships and self-concept.

Demonstrate an understanding of the importance of regular and sustained physical activity throughout life.

Health Enhancement Portfolio Summary

Upon graduation, the student shall have had the opportunity to:

KNOWLEDGE:

Be able to evaluate and select health services, practices, and products.

Understand the relationship of sound nutrition to total health.

Identify careers in health and physical activity and their roles and responsibilities.

SKILL:

Demonstrate a variety of physical skills used in physical activity, including but not limited to dance, individual, dual, or team sports, and lifetime leisure and recreational activities.

Demonstrate an appropriate level of physical fitness in cardio-respiratory function, body composition, and musculoskeletal function.

ATTITUDE:

Understand the roles, responsibilities, contributions, and life cycles in family structures.

Understand the risks of using drugs, alcohol, and tobacco.

Understand attitudes and behaviors for preventing and controlling disease and accidents.

Understand human reproduction and the emotional and ethical components of human sexuality.

Understand the consequences of personal and community decisions that affect the economy and the cost, availability, and quality of health care.

Understand the relationship of sound mental health practices to total health.

BEHAVIOR/THINKING SKILLS:

Understand the importance of a positive self-concept and interpersonal relationships for total health.

Understand the role of lifelong physical activity and the principles of safe and effective exercise; be able to plan a personal fitness program.

K-4 Mathematics Portfolio Summary

In a basic mathematics program, students communicate mathematically, reason mathematically, and solve problems. In order to reach these outcomes, students:	Extended Problems	Journal Writing	Questioning	Observation
Interpret and apply the multiple uses of numbers encountered in everyday life.				
Apply estimation in working with quantities, measurements, computation, and problem solving.				
Use statistics and probability to solve problems, draw conclusions, and make predictions and then present and justify solutions, conclusions, and predictions.				
Develop a sense of spatial relationships through the concepts and language of geometry.				
Make and utilize measurement in problem and everyday situations.				
Interpret and apply the predictability of patterns in relationships to every strand of mathematics.				

5-8 Mathematics Portfolio Summary

In a basic mathematics program, students communicate mathematically, reason mathematically, and solve problems. In order to reach these outcomes, students:

	Extended Problems	Journal Writing	Questioning	Observation
Develop number sense.				
Develop an appreciation for the pervasive use of probability in the real world and for statistical methods as powerful means for decision making.				
Develop formulas and procedures for determining measures to solve problems.				
Develop a sense of geometry as a means of describing the physical world.				
Apply algebraic methods to solve a variety of real-world and mathematical problems.				

9-12 Mathematics Portfolio Summary

<p>In a basic mathematics program, students communicate mathematically, reason mathematically, and solve problems. In order to reach these outcomes, students:</p>	<p>Extended Problems</p>	<p>Journal Writing</p>	<p>Questioning</p>	<p>Observation</p>
<p>Learn and apply the terminology, symbolism, and fundamental properties of various branches of mathematics.</p>				
<p>Select and use appropriate methods for computing.</p>				
<p>Develop an understanding of mathematical modeling by: observing, collecting, organizing, analyzing, and interpreting data; formulating mathematical models; making conclusions based on the models; and verifying conclusions.</p>				
<p>Use functions and relations as models.</p>				
<p>Represent problem situations with geometric models.</p>				
<p>Use quantitative strategies to analyze, draw inferences, make predictions, and make decisions based on real-world data.</p>				
<p>Form and verify generalizations about numbers and operations on numbers.</p>				
<p>Use the measurement process to analyze, describe relationships, and solve problems.</p>				





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